In The Claims

Claims 32, 34-36, 38-40, 42, 43, 47, 49-51, 53-55, 57, 58, 61, 68-75, 83, and 84 are pending in the application with claims 68, 83, and 84 amended herein.

Claims 1-31 (cancelled).

32. (previously presented) A tantalum disc comprising at least about 99.95 weight percent tantalum, a substantially uniform {100} crystallographic orientation across a surface of the disc, an average tantalum grain size of less than 50 microns at the disc surface, and a maximum tantalum grain size of less than 50 microns at the disc surface.

33. (cancelled).

34. (previously presented) The disc of claim 32 further comprising an average grain size of about 25 microns.

35. (previously presented) The disc of claim 32 produced from a frictionless forged billet.

36. (previously presented) The disc of claim 32 having a thickness, wherein the disc comprises the substantially uniform {100} crystallographic orientation throughout the thickness.

37. (cancelled).

38. (previously presented) A tantalum disc comprising at least about 99.95 weight percent tantalum and consisting of grains exhibiting a maximum grain size of less than 50 microns.

39. (previously presented) The disc of claim 38 produced from a frictionless forged billet.

40. (previously presented) A tantalum disc consisting of grains exhibiting an average grain size of about 25 microns and a maximum grain size of less than 50 microns.

41. (cancelled).

42. (previously presented) A tantalum disc comprising at least about 99.95 weight percent tantalum; the disc having a thickness and a maximum grain size of less than 50 microns throughout the thickness; the disc also comprising a substantially uniform {100} crystallographic orientation throughout the thickness.

43. (previously presented) The disc of claim 42 comprising an average tantalum grain size of less than 50 microns throughout the thickness.

44-46 (cancelled).

47. (previously presented) A tantalum plate comprising at least about 99.95 weight percent tantalum, a substantially uniform {100} crystallographic orientation across a surface of the plate, an average tantalum grain size of less than 50 microns at the plate surface, and a maximum tantalum grain size of less than 50 microns at the plate surface.

48. (cancelled).

49. (previously presented) The plate of claim 47 further comprising an average grain size of about 25 microns.

50. (previously presented) The plate of claim 47 produced from a frictionless forged billet.

51. (previously presented) The plate of claim 47 having a thickness, wherein the plate comprises the substantially uniform {100} crystallographic orientation throughout the thickness.

52. (cancelled).

53. (previously presented) A tantalum plate comprising at least about 99.95 weight percent tantalum and consisting of grains exhibiting a maximum grain size of less than 50 microns.

54. (previously presented) The plate of claim 53 produced from a frictionless forged billet.

55. (previously presented) A tantalum plate consisting of grains exhibiting an average grain size of about 25 microns and a maximum grain size of less than 50 microns.

56. (cancelled).

57. (previously presented) A tantalum plate comprising at least about 99.95 weight percent tantalum; the plate having a thickness and a maximum grain size of less than 50 microns throughout the thickness; the plate also comprising a substantially uniform {100} crystallographic orientation throughout the thickness.

58. (previously presented) The plate of claim 57 comprising an average tantalum grain size of less than 50 microns throughout the thickness.

59. (cancelled).

60. (cancelled).

61. (previously presented) A plate comprising at least about 99.95 weight percent tantalum and consisting of grains exhibiting an average grain size of less than about 25 microns and a maximum grain size of less than 50 microns.

62-67 (cancelled).

68. (currently amended) A tantalum sputtering target blank comprising:

(a) at least about 99.95 weight percent tantalum; and

(b) a substantially uniform {100} crystallographic orientation throughout the thickness of said blank.

69. (previously presented) The tantalum target blank of claim 68 comprising a sputtering target.

70. (previously presented) The tantalum sputtering target of claim 69 produced from a frictionless forged billet.

71. (previously presented) The tantalum sputtering target of claim 69 having an average grain size of less than 50 microns at the target surface.

72. (previously presented) The tantalum sputtering target of claim 69 having an average grain size of less than 25 microns at the target surface.

73. (previously presented) A tantalum sputtering target comprising:

(a) at least about 99.95 weight percent tantalum; and

(b) a uniform texture across a surface and throughout a thickness of the target.

74. (previously presented) An as-rolled tantalum target comprising:

(a) at least about 99.95 weight percent tantalum; and

(b) a substantially uniform {100} crystallographic orientation across a surface of said target.

75. (previously presented) The as-rolled tantalum target of claim 74 having an average grain size of less than 50 microns at the target surface.

76-82 (cancelled).

83. (currently amended) Tantalum metal comprising a texture in which a {100} pole figure has a center peak intensity of ~~about 7 to about 17~~ 6.97 to 17.16 random.

84. (currently amended) The tantalum metal of claim 83 wherein the center peak intensity is ~~about 17~~ 17.16 random.